Claims

What is claimed is:

1. A method for controlling an amount of engagement of a clutch with a transmission, comprising the steps of:

selecting an engagement parameter;

determining a desired operating parameter associated with the engagement parameter; and

calibrating a control system to generate an engagement control signal to achieve the engagement parameter based on the desired operating parameter.

2. A method, as set forth in claim 1, wherein selecting an engagement parameter includes the step of selecting at least one of a full slip and a zero slip engagement parameter.

3. A method, as set forth in claim 1, wherein determining a desired operating parameter includes the step of determining a desired parameter indicative of a pressure applied to the transmission by the clutch.

4. A method, as set forth in claim 1, wherein determining a desired operating parameter includes the step of determining a desired parameter indicative of an output speed of the transmission.

5. A method, as set forth in claim 1, wherein calibrating a control system includes the step of calibrating the engagement control signal to achieve the engagement parameter in response to the control system receiving the desired operating parameter.

6. A method, as set forth in claim 5, wherein calibrating the engagement control signal includes the step of calibrating at least one of a current and a voltage of the engagement control signal.

7. A method, as set forth in claim 1, wherein the clutch and transmission are drivably connected to an engine, and further including the step of setting at least one engine operating parameter to a desired condition prior to the step of calibrating.

8. A method for calibrating a control signal for engagement of a clutch with a transmission, comprising the steps of:

selecting a parameter associated with an amount of engagement;

determining a desired value of an operating parameter; and

adjusting a control signal such that the desired operating parameter value is calibrated to the amount of engagement.

9. An apparatus for controlling an amount of engagement of a clutch with a transmission, comprising:

means for selecting an engagement parameter;

means for determining a desired operating parameter associated with the engagement parameter; and

means for calibrating a control system to generate an engagement control signal to achieve the engagement parameter based on the desired operating parameter.

10. A computer-based method for calibrating a control signal for engagement of a clutch with a transmission, comprising the steps of:

receiving a command signal to initiate a calibration procedure;

checking a status of at least one operating condition;

proceeding with the calibration procedure in response to determining that the status of the at least one operating condition has been met; and

adjusting the control signal to achieve a desired amount of engagement of the clutch with the transmission.

11. A computer-based method, as set forth in claim 10, further including the step of delivering a notification signal that the calibration procedure is complete.

12. A computer-based method for calibrating a control signal for a trolling valve, the trolling valve operable to control an amount of engagement of a clutch with a transmission, comprising the steps of:

receiving a command signal to initiate a command procedure;

checking a status of at least one operating condition;

determining that the status of the at least one operating condition has been met;

selecting one of a full engage and a full slip amount of engagement;

determining a value of the control signal needed to achieve the selected amount of engagement;

selecting an other of the full engage and full slip amount of engagement;

determining a value of the control signal needed to achieve the other selected amount of engagement; and

delivering a notification signal that calibration is complete.

13. An apparatus for calibrating a control signal for engagement of a clutch with a transmission, comprising:

an operator interface;

a control system in communication with the operator interface and configured to calibrate the control signal to correspond to an amount of engagement of the clutch with the transmission; and

a trolling valve operable to receive the calibrated control signal from the control system and responsively control the amount of engagement of the clutch with the transmission.

14. An apparatus, as set forth in claim 13, further including at least one sensor electrically connected to the control system.

15. An apparatus, as set forth in claim 14, wherein the at least one sensor includes a sensor for determining a pressure of the clutch applied to the transmission.

16. An apparatus, as set forth in claim 14, wherein the at least one sensor includes a sensor for determining an output speed of the transmission.

17. An apparatus, as set forth in claim 14, wherein the control system includes:

a calibration module for receiving signals from the operator interface and the at least one sensor and responsively calibrating the control signal; and

a control signal module for generating the calibrated control signal and delivering the signal to the trolling valve.